

Appln No. 09/943,583
Amdt date November 9, 2006
Reply to Office action of August 9, 2006

REMARKS/ARGUMENTS

Claims 1-9, 13-14, 17-30, 32-43, and 46-60 were pending in this application when last examined by the Examiner. Claims 1, 14, 17-18, 21, 35, 46-47, 50-52 and 56 have been amended. Claims 13, 22-30, 32-34, 53-54 and 57-60 have been canceled. Claims 61-62 have been added. This Amendment is being submitted with a Request for Continued Examination. Entry of the above amendments and an early indication of allowance of the now-pending claims 1-9, 14, 17-21, 35-43, 46-52, and 55-56, and 61-62 are respectfully requested.

As an initial matter, Applicant submits that an IDS was mailed on July 27, 2006, that included copies of the references which were crossed out by the Examiner. All copies were included in that IDS except for copies of the IBM references that are being concurrently submitted herewith in a new IDS. Accordingly, withdrawal of the IDS objection is respectfully requested.

Claims 1, 4-6, 13-21, 32-35, 38-40, and 46-60 are rejected under 35 U.S.C. 103(a) as being obvious over Shoff et al. (U.S. Patent No. 6,240,555) in view of Wistendahl et al. (U.S. Patent No. 6,496,981). Claims 22-26 and 29-30 are rejected as being obvious over Srinivasan et al. (U.S. Patent No. 6,357,042) in view of Wistendahl. Claims 2, 36, and 41 are rejected as being obvious over Shoff in view of Wistendahl further in view of Hidary et al. (U.S. Patent No. 5,774,664). Claims 3 and 37 are rejected as being obvious over Shoff in view of Wistendahl further in view of Eyer et al. (U.S. Patent No. 5,982,445). Claims 7-9 are rejected as being obvious over Shoff in view of Wistendahl as applied to claim 1, further in view of Travaille et al. (U.S. Patent No. 6,067,107). Claim 27 is rejected as being obvious over Srinivasan in view of Wistendahl further in view of Shoff. Claim 28 is rejected as being obvious over Srinivasan in view of Wistendahl further in view of Purnaveja et al. (U.S. Patent No. 6,006,241). Claim 42 is rejected as being obvious over Shoff in view of Wistendahl further in view of Oguro et al. (U.S. Pub. No. 2001/0033739) and Hidary. Claim 43 is rejected as being obvious over Shoff in view of Wistendahl further in view of Purnaveja. Applicant respectfully traverses these rejections.

Applicant respectfully submits that neither Wistendahl, Srinivasan, nor Shoff, alone or in combination with one another, teach or suggest all of the limitations of amended claim 1.

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Specifically, none of these references teach or suggest at least "an annotation system tracing movement of two or more video objects appearing in each of the plurality of consecutive video frames from a first location to a second location and generating annotation data and annotation data timing information, the annotation data including only one mask for each video frame of the plurality of consecutive video frames, each mask being stamped with the corresponding annotation data timing information based on a frame time of the corresponding video frame, each mask including location and graphics data of two or more graphics images to be overlaid on the two or more video objects appearing in the corresponding video frame," where "the overlaying of the two or more graphics images is synchronized on a frame-by-frame basis with the movement of the two or more video objects from the first location to the second location over the plurality of consecutive video frames" by "compar[ing] a current annotation data timing information with a current frame time of a current video frame" as is now required by amended claim 1.

Any tracing of video objects in Wistendahl is to figure out which portions of the video objects are to be rendered interactive as "hot spots." The location of such hot spots are then stored as "N data" and linked to interactive responses via an IDM program. (See, Col. 7, lines 1-10; Col. 10, lines 27-31). Although an interactive response may be the overlaying of a graphics image on a video frame, nothing in Wistendahl teaches or suggests that the "location and graphics data" for a particular graphics image that is to be overlaid is stored in "only one mask" that is generated "for each video frame of the plurality of consecutive video frames" for a "frame-by-frame" synchronization of the overlay of the "two or more graphics images" on the "two or more video objects . . . over the plurality of consecutive video frames" based on a comparison of "a current annotation data timing information with a current frame time of a current video frame." Any trivia or other movie information that is to be displayed via Wistendahl's system need not be synchronized in the manner required by claim 1, and much less, via a comparison of "current annotation data timing information against a current frame time" for "each of the plurality of consecutive video frames." Furthermore, the IDM program relied on by the Examiner is not the claimed "mask," even if it contains graphics data, because it is not generated "for each video frame of the plurality of consecutive video frames."

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Schoff discloses supplemental content that enables viewer interactivity with a video content program. Although Schoff teaches that timing information may be defined to synchronize presentation of the supplemental content with the video content program, such supplemental content is not generated "for each video frame of the plurality of consecutive video frames" for overlaying a graphics image, "wherein the overlaying of the two or more graphics images is synchronized on a frame-by-frame basis with the movement of the two or more video objects from the first location to the second location over the plurality of consecutive video frames." Instead, the information that Schoff seeks to synchronize is information which is initially to be triggered at a particular point in time, such as quiz questions, but need not be synchronized on a frame-by-frame basis with the movement of any video object, and much less, via a comparison of "current annotation data timing information against a current frame time" for "each of the plurality of consecutive video frames."

Srinivasan discloses a method and apparatus for multiplexing separately-authored metadata for insertion into a video data stream. Srinivasan discloses a tracking module which tracks the frame-by-frame movement of an image entity, and generates coordinates of the tracked image entity. (Col. 7, lines 21-31). The end result of the tracking process is "a series of coordinates of an assumed center point of a tracking object associated with the image entity selected to be tracked." (Col. 7, lines 32-35). However, nothing in Srinivasan teaches or suggests that such coordinate-tracking data includes "a mask data packet set for each video frame of the plurality of consecutive video frames . . . each mask data packet set including location and graphics data of a graphics image to be overlaid on the video object appearing in the corresponding video frame." (Emphasis added). Although Srinivasan does disclose annotation data that may include graphics data, nothing in Srinivasan teaches or suggests that such data is generated "for each video frame of the plurality of consecutive video frames" for overlaying of the two or more graphics images "synchronized on a frame-by-frame basis with the movement of the two or more video objects from the first location to the second location over the plurality of consecutive video frames" via a comparison of "current annotation data timing information

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against a current frame time" for "each of the plurality of consecutive video frames" as is required by claim 1. Accordingly, claim 1 is now in condition for allowance.

Independent claim 35 includes limitations that are similar to the limitations of claim 1 which make claim 1 allowable. Accordingly, claim 35 is also in condition for allowance.

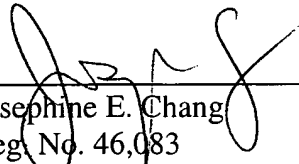
Claims 2-9, 14, 17-21, 36-43, 46-52, and 55-56 are also in condition for allowance because they depend on an allowable base claim and for the additional limitations that they contain.

Claims 61-62 are new in this application. Claims 61-62 are also in condition for allowance because they depend on an allowable base claim and for the additional limitations that they contain.

In view of the above amendments and remarks, reconsideration and an early indication of allowance of the now-pending claims 1-9, 14, 17-21, 35-43, 46-52, 55-56, and 61-62 are respectfully requested.

Respectfully submitted,
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